

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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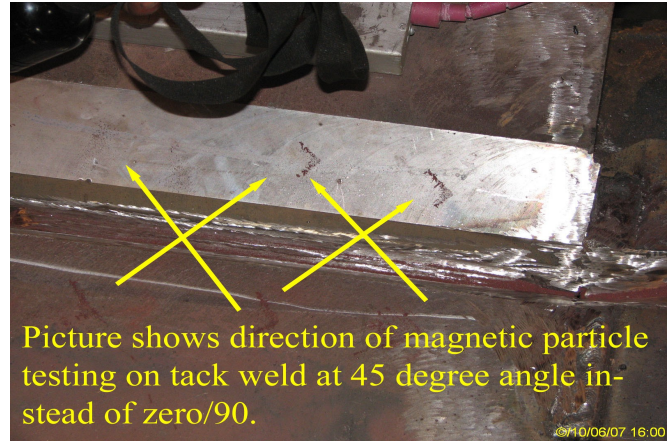
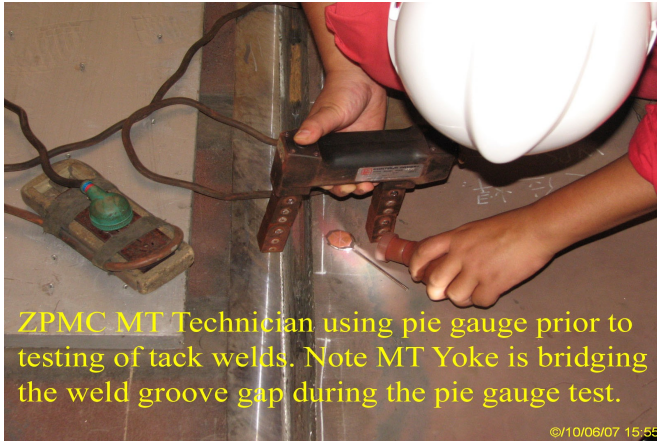
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000580**Date Inspected:** 06-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 77 & 89 Meter Mock-Ups**Summary of Items Observed:**

This Quality Assurance (QA) Inspector observed ZPMC Magnetic Particle Testing (MT) Technician, Zhou Dong Yun testing the tack welds on the 89 Meter Mock-Up, MA24 Skin Plate Sub-Assembly (Face B), weld joint 5/6 joining MA24 to mp505. It was noted during the testing that Mr. Zhou was placing his MT yoke at 45 degree angles to the direction of welding instead of the conventional zero/ninety degrees. Mr. Zhou was being very methodical in ensuring the each area was tested in two directions perpendicular to one another. Prior to testing Mr. Zhou tested the MT Yoke by placing the yoke across the weld gap and using a pie gage verify direction of field and a lift test was also performed. 10% QA verification MT was conducted, for details see TL-6028 dated October 6, 2007.

This QA Inspector observed ZPMC Welder Han Xiofeng, welder identification 054467 welding in the horizontal fillet (2F) position of lifting pad eyes onto plate mp512. The welder was using an approved welding procedure specification with a voltage setting of 25, amperage 204 with a inter-pass preheat temperature of 141 degrees Celsius (C).

WELDING INSPECTION REPORT

(Continued Page 2 of 2)



Summary of Conversations:

A conversation was held with ZPMC Staff Zhang Jia Di concerning quality control (QC) versus quality assurance (QA) roll in performing magnetic particle testing. Mr. Zhang had called QA out to perform MT verification testing on the 77 Meter Mock-Up, Skin D. When this QA Inspector observed the weld it was noted that there were markings on the weld placed there by the QC MT Technician for indication removal. Mr. Zhang was looking for QA to perform their verification testing prior to indication removal. It was explained to Mr. Zhang that when all indications are removed and QC has performed an MT which finds the weld to be in an acceptable state then QA would perform their 10% verification testing.

In a second conversation with Mr. Zhang the QA MT of the 77 Meter Mock-up, Skin D was discussed. Due to the impending typhoon QA was being pulled off the island so it would be impossible for the verification MT to be performed this evening. After discussing the issue with Mr. Jimmy Cochran, Zhang was given the OK to continue

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Berger, Bruce

Quality Assurance Inspector

Reviewed By: Cochran, Jim

QA Reviewer